

**Notes from Meeting for State Agencies to Discuss Global Climate Change**  
**Interagency Climate Group**  
**April 7, 2006**

**Brief Summary:**

The state level discussion on climate change and Washington state covered two main areas: (1) greenhouse gas emission reduction efforts, and (2) adaptation planning (how do we adapt when climate change arrives). The agencies went around the room to describe their efforts to reduce emissions and think about the future. Ecology discussed their evaluation of economic impacts and adaptation. The group plans to meet again in several weeks to follow-up. Overall there is an interest in reviving the discussion on setting emission reduction targets for the state to reduce future impacts and to plan for needed infrastructure changes when climate change does occur.

The economic study will likely be complete September 2006. The governor/OFM would like an action plan/possibly policy by the fall of this year in preparation for the 2007 legislative session.

**Alert:**

Climate Change to be a highlighted area of discussion/presentation at Governor Gregoire's cabinet retreat. Jay Manning to give a presentation. After jobs, health, and education, this may be the next big area of emphasis depending on the governor's choice of interest.

**Attendees:**

Tom Schooley – WA Utilities & Transportation Commission (WUTC)  
Tony Ifie – WA Dept of Natural Resources (DNR)  
Dana Warn – US Environmental Protection Agency - PSCAA  
Leslie Stanton – Puget Sound Clean Air Agency (PSCAA)  
Stacey Waterman-Hoey - WSU Energy Program  
Kathleen Drew - Governors Policy Office  
Keith Phillips - Governors Policy Office  
Matt Steuerwalt - Governors Policy Office  
Tony Usibelli - CTED  
Carolee Sharp - CTED  
Chris Carlson – WA State Insurance Commission (OIC)  
Liz Klumpp - CTED  
Mia Waters – WA State Dept. of Transportation (WSDOT)  
Stu Clark - Ecology  
Kurt Unger - Ecology  
Jim Cahill – WA State Office of Financial Management (OFM)  
Greg Nothstein - CTED  
Ron Shultz – Puget Sound Action Team (PSAT)  
Stu Trefry - Conservation Commission

Jake Fey - WSU Energy

Meeting started at 9:30 a.m. with Tony reviewing agenda.

**Handouts included:**

1. Global Warming & Alternative Energy: A Leadership Survey, authored by Civil Society Institute, 40MPG.org, and Opinion Research Corporation
2. Economic Impacts of Climate Change in Washington: 2006 Project Workplan and Budget (4/3/06 Draft)
3. 2006 Sources of Emissions in Washington (a series of charts & graphs from WSU Energy program)
4. 2007-2009 Puget Sound Conservation and Recovery Plan: Priority 8-Prepare for and adapt Puget Sound efforts to a changing climate

**Other documents and web links:**

1. Uncertain Future: Climate change and its effects on Puget Sound  
[http://www.psat.wa.gov/Publications/climate\\_change2005/climate\\_home.htm](http://www.psat.wa.gov/Publications/climate_change2005/climate_home.htm)
2. The Foundation Document  
[http://www.psat.wa.gov/Publications/climate\\_change2005/pdf\\_files/Foundation\\_final\\_1\\_lr.pdf](http://www.psat.wa.gov/Publications/climate_change2005/pdf_files/Foundation_final_1_lr.pdf)

**Notes:**

**Mia Waters - WSDOT**

Provide CTED with cost/economic information relating to infrastructure improvement costs (e.g., culvert replacement with larger capacity, bridge re-sizing, flood plain effects, etc where possible).

- Lots of cars on the road, more coming.
- DOT taking a multifold approach to greenhouse gas reduction, energy change and co-benefits
- Experimenting with hydrogen fuel cells in a radio tower on Pinus Mtn.- continuous energy (full or backup power questioned by Kathleen Drew)
- Building facility - sustainability & green practices including separating the heating boiler from hot water system. Use motion detector lights, recycling, and "wise" paper use.
- Roadways - incident response vehicles added, changing to diesel vehicles
- Looking to improve - \$400K grant to West Coast Diesel Collaborative to retrofit incident response vehicles to LED readout signs so engine can be off.
- Ferry operational improvements – speed, route etc (per Tina Stotz last year)
- Overcome price differentials of hybrids for fleet use – standard vs. hybrid savings differences.
- Solar lighting (some highway signs)
- Avoided SUV purchase
- Asphalt recycling

- Trying to have internal conversation with construction and design teams to redesign culverts and bridges for climate change activities (flooding?)

Things we could do/possibly looking into

- Encourage more hybrid purchases for sedan fleets
- Educate maintenance vehicle operators about shutting off engines (anti-idling)
- Alternative fuel additives/enzymes
- Traffic signal capacitors, battery or hydrogen backup power to keep signals working during power outages (anti-idling, reduce congestion)
- As technology matures, look more closely at plug-in technology. Interested in Snohomish County research into vehicle plug-in stations

Mentioned US EPA's seeding/no till grant to reduce agricultural fuel use on the farm.

Questions for WSDOT: identify the connections with transit and what influence we have on it. Electrify rest areas for truck idle reduction?

### **Ron Shultz – PSAA**

- Report coming out on climate change and effects on Puget Sound (PS)
- Biennial workplan out for review – 07-09 – this is by statute. New priority is adapt to changing climate and Increase studies in climate change
- Implication on salmon habitat projects due to climate change. Look at low lying flood plain risk, affects on salmon restoration efforts/habitat in an effort to keep our projects from demolition by increased water flow. For results – work with other to implement and track progress (still in draft) final by end of May.
- Need to improve risk assessment models – infrastructure at risk due to water levels. Seawall in Seattle – increase in sea level seabed would increase wall construction costs. 100 year flood now happening every ?? year. Appropriate sizing of infrastructure (stormwater, Seattle seawall)
- Brad Ack said we need to move on CO2 reduction

For the areas listed above, take a package of options out for public input and go through legislative budget process next year (reference handout *2007-2009 Puget Sound Conservation and Recovery Plan: Priority 8-Prepare for and adapt Puget Sound efforts to a changing climate*)

### **Tom – UTC**

- In 2002, Washington electricity related carbon emissions were 3<sup>rd</sup> lowest in the nation.
- Wind power fastest growing resource in WA, helps that Washington has distributed power allowance for electricity to go onto the grid from these small producers
- Planning needs to include how to reduce/eliminate greenhouse gases and co2 in electricity generation
- PSE already pursuing efficiencies as is AVISTA and PacifiCorp

- Renewables – PSE 10% wind, AVISTA – biomass and wind
- Biomass plant – 50 megawatts from woodchips in Kettle Falls

#### **Leslie – PSCAA** (Missed most of this)

- Like to see the Governor and government embrace this topic more. Communications efforts with state legislature regarding renewable portfolio standard, cap n' trade
- Diesel solutions – switch to low sulfur diesel and biodiesel with particulate filtering. Concentrate in implementing publicly available E85 (85% ethanol, 15% gasoline) stations.
- Green fleets plan
- Truck stops – electrification, Cascade Sierra Solutions – Everybody Wins – anti-idling units for trucks – tax incentives, alternative power units (APUs), smartway EPA loan program/wind dynamics, fuel efficiency
- Climate protection agreement / Mayor Nickels-Seattle.
- Help partners
- Encouraged by strong state response, people are looking to gov't to take an active response on climate change (especially timetables and reduction goals)
- Diesel solutions (diesel emission reduction) efforts (related to black carbon in atmosphere and overall fuel use)

#### **Chris – OIC**

- ½ of their agency vehicles are hybrid (one of two)
- Mike committed to look at effect of climate change on insurance business. Insurance picks up the tab on disasters (hurricane, fire, drought, etc). Commission needs to assure that farmers, property owners etc can get affordable insurance and assure that companies are solvent.
- Hosting conference on June 15<sup>th</sup> in Seattle – a NW Insurance Summit with UW Climate Solutions group, likely at Kane Hall at UW/Seattle. This will include insurance, re-insurance companies etc. It will cover risk modeling, lessons learned with Hurricane Katrina, and economic issues
- Technical assistance working on pay as you drive pilot program what's happening in the current market.
- King County is piloting a “pay as you drive” insurance coverage plan based on miles driven in vehicle. Commission will approach national association of insurers to see if states grouping together can increase the market provided with multi-state purchasing power.
- There is a multi-state coop trying to work out how to effectively purchase greenhouse gas reducing products.

#### **Jake – WSU Energy**

- Co-chairing PS Clean Air task force
- On the board of the City of Tacoma clean air board
- City of Tacoma is adopting Kyoto standards – announcement this month. They should have an emissions inventory done by the end of year.

- WSU – climate change and rural development unit of state is non-funded. WSU has the climate center for the state. Looking at emissions from fuels, with an inventory that covers alternative/biofuels. Working with the Clean Cities Coalition to get projects funded.
- Need to prepare web visibility for information
- Working at getting projects funded (SeaTac airport, bus fleets, substitute fuels)

### **Stu Trefry – Conservation Commission**

- Service to conservation districts – conduit to private
- Land owners interest in natural resources - \$30 mill in grants per biennium available.
- The more grants received, the more they see focus on green activities. Perhaps include a selection criteria based on greenhouse gas savings or sequestration.
- Spokane is spending on forest, biodiesel, methane digesters, & practices.
- CC works with methane digesters
- CC plants millions of trees
- Seeing more on climate and GHG issues in grant requests.
- Tidegates management – Skagit – replacing with fish friendly – help to manage properly, helping farmers and fish. Prepare for changing water levels.
- Biggest growing clientele are small land owners (5 acres) needing assistance and education

Mia –

- Replacing tidegates – turbines might fit in
- EPA provided grant in eastern WA (Lincoln County) on no till seed farming to save fuel. Lincoln Co. conservation funding on the no till – it's working with interesting results
- One farmer is producing amazing results using unconventional methods – word of mouth helps to spread ideas in a faster and more efficient way.

### **Tony Ifie – DNR**

- Climate change effects – under pressure from stakeholders. Will cooperate with other agencies to work on this.
- Setting up group to discuss carbon sequestration and create recreate revenue stream for land managers (e.g., are there other ways to make money on dealing with climate change and encourage more funding like forestry related carbon credits).
- California is moving in same direction – ahead of us. Looking into how DNR can make carbon credits work given that there's no structure to move forward without a cap n trade program. Perhaps can use the California mechanisms with the carbon registry. Washington starting at point zero right now.
- Innovative ways to move this forward. There are economic issues.
- Potential sequestration study\* started in 2003 – 4 or 5 other states with grant from Federal – just finishing and in peer review right now. Study to figure out what forestry industry can do in Washington, looking at the economic value of state and ways to address 21<sup>st</sup> century needs.
- Biofuel/energy could help generate income, like with digesters, wood cellulose.

- DNR wants income for schools, county governments etc and is looking for partners. In January 2006 invited land owners to talk. Larger companies more aware than smaller ones. Smaller companies see the issue as a battle to be wary of.

\*(All would like briefing when study is complete)

Discussion about BC's study on harvesting areas of pine beetle infested forest as biofuel resource— but all thought that the numbers didn't add up in the cellulose use.

Tony mentioned the topic was not discussed in 3 recent briefings.

- Look over the notes and please add to or change them for your section as needed.
- Would like links to all the studies and reports produced by agencies to list in CTED's website
- CTED & WSU involved in climate, implications and energy data needs.
- Related to infrastructure investments – what are the resource efficiencies?
- WESCOM, made up of five states (WA, CA, OR, AZ, and AK) through a US Dept of Energy grant, conducted a study starting in 2003 which will be completed soon. It will identify a baseline; identify what carbon sequestration opportunities are available and where there may be opportunity for more. OFM and the state agencies want a briefing on the outcomes of this report when it is completed.
- British Columbia did a study to see if harvest of bark beetle damaged trees could be used with biodigesters for make energy. They abandoned the effort because it didn't cost out due to higher than expected transportation costs.
- The Netherlands has invested money in a biodigester in Monroe, WA to meeting their Kyoto obligations. Are there any other examples of this? Can someone track it? Are other countries in Kyoto getting involved in our experiments?
- Concern with infrastructure – public works and housing trust funds. Want to raise profile of greenhouse gas issues with infrastructure investments – sustainability etc.

## **Stu Clark – Ecology**

- Ecology's environment footprint – building is LEED silver certified and energy consumption is reduced
- Grant for 3 large truck stops for electrification
- Clean car standards rules competed and starts in 2009. \*(Tony provided side on car standards – Oregon finalizing their car rule soon)
- Internal to Ecology
  - Ad hoc multi-program workgroup on climate change policies – air, shore, governance, state government structure, information gaps, climate impacts group info, vulnerabilities in the state. Bring more into decision making.
  - Director wants to move the state forward on this. Need formal commission and tracking. Need economic impacts and elements
  - Funding updating inventory of GHG emissions
  - Funding economic consequences of climate change and GHG study

Question on EPACT brought up? Where are we at on allowing hybrids from EPACT requirements moving forward and flex fuel (E85 stations)?

- Tony has not heard anything – think petition will be denied
- Hybrids practical value – think Federal law is wrong
- E85 part of a strategy – but no one in control – still in talks
- Life cycle cost analysis needed
- Put petition forward

### **Stacey – WSU Energy – Passed handouts**

- Discussion of handouts
- GHG sources and trends report
- Needs updating and extrapolation to 2004
- CO2 dominant GHG – energy production high, transportation high.
- With low water levels there are more emissions for power production
- Fuel mix report includes generation resources external to state
- EIA reported generation is internal to state
- Centralia coal power plant produces 10% of all GHG emissions in WA
- Increase of emissions 1990 8.5 mill to 2000 9.2 mill
- Of the 95% CO2 emissions – 56.4% is transportation, of which 51% is motor gasoline, 16% diesel and 2.2% is jet fuel.
- Building sector – residential and commercial constant over 40 years with fuel switching and increased efficiencies in buildings
- Data is several years behind using federal information – looking for grants to pursue this
- Population and CO2 emissions – strong correlation
- Centralia scrubbers had no effect on CO2 emissions
- GHG report being updated and hope to be done in June this year

### **Tony – CTED Energy**

#### **Next meetings –**

- Work on ability to do more work – resources and grants
- Where should focus be
- Need more time and more discussions

#### **Policy choices –**

- What questions do you want answers to? Focus, inventory?
- What are critical movers for our state?
- Subdividing by type or geographically?
- Emission inventory being worked on by a group of counties and due out?

## **Greg – CTED**

- Economic impacts study underway. UW meeting – Economic consequences of climate change in state research underway.
  - What information is available on climate and sectors in our state?
  - Study in early stage – steering committee just met. Next meeting in May. Dim on assessments at this point.
  - Study should focus on 3-4 sectors including hydro (energy), Agriculture (subsectors) and recreation (skiing?)
- \*(comment made that maybe have the insurance group included)
- Who should the stakeholders be? Need to develop a list.
  - Report draft done by July with final by October, hope before session.
  - There are pieces already done or in process that can be brought into this
  - Tellus Group may be good contact on this
  - If folks have economic impact assessments or climate change or estimate on say, increased flooding, please let CTED have the info.

## **Keith – Governor's Policy**

- Get politicians behind this – rollout would be great for October (before voting)

## **Mia –**

- Commute trip reduction (ctr) reporting – Starbucks (and other companies) showing interest in credits they can take in promoting hybrids, ctr and GHG reduction.
- National Coop Highway Association – looking for transportation related ghg reductions and steps to take

## **Tony - CTED**

- West Coast Governor's Assoc. – Western State Energy Board
- Washington is not alone on this. The climate change group is continuing to move forward on this and recommendations to governor's for positive policy action.

## **Kathleen – Gov's Policy Office**

- WRAP (sp??) – other states are implementing strong efforts for climate action. Getting positive reinforcement from citizens. Have funds to support inventory and analysis. Asking for staff connection and data. Want to tailor for specific states
- Stacey and Stu connect with Tom Peterson – may enable furthering of our resources
- New Mexico joined Chicago Climate Exchange – we may want to consider this.

## **Tony – CTED**



- In a survey last month there's been an attitude shift about climate change. Strong sense of federal failure to act. Tony will send full report.

### **Stu & Kurt – Ecology**

- Working on fall conference on water and climate change. Need to protect our water resources.
- Climate change bringing more rain, less snow, reduced water storage, runoffs 2-3 weeks earlier, less groundwater, lower stream levels, water rights transfer issues. There is not enough monitoring, not much known – need studies on how to keep water levels in streams and storage. What are the effects? How vulnerable are we?
- Comment - 70% of Columbia mainstream is snow pack.
- Eastern WA – irrigation districts had 1/3 of water in drought years – study needs to be done. Impacts are that drought years will be more frequent.

### **Wrap-up -**

- Followup - Request any information of value on:
  - Economic impacts studies
  - Climate impact
  - Increased flooding
- Send out notes and presentations
- Return supplemental items and add to the notes or clarify them
- Web links – please send to Carolee at [carolees@cted.wa.gov](mailto:carolees@cted.wa.gov)
- Insurance Commission meeting
- Look at 07-09 Climate Change priority (Ecology)
- Who's sending out states message and information? CTED will serve role for now.
- BC-6 policy full time on issue. California working on this
- Last drought \$2 million in damages
- Land use planning people – are they part of any of this?

### **Leslie – PSCAA**

- Do we have timeline to set up policies and action plan?
- What can be provided to develop research and lead to set of actions?
- PS Action team is working with others to get this in their plans.

**DOT** – not a big part of theirs, but maybe should be.

**Energy** – we do reports to bring about successes in things we're doing and try to go next step to bring about climate change agenda.

**Keith – Gov.**

Not sure what's coming out – Gov's cabinet meeting is next week. Are suggesting to Gov. that she make this a big policy issue. CTED's and DOE directors ready to make the push, so should all other agencies.

**Liz** – Denmark produced a video to educate the citizens of what would be worst case climate change.

**Tony** – Gore's climate change video is coming – all should see it.

**Jim – OFM** – This group can help OFM and Gov. on what needs to be done to invest money to go the furthest.

**Kathleen and Keith** will plan next meeting. Emergency management, military and ag should be included.